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Revisiting Prochaska and DiClemente's Stages of Change Theory: An Expansion and Specification to Aid in Treatment Planning and Outcome Evaluation

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Why people change and why they do not change is a question that therapists have asked for many years. For almost two decades one model of change has stood as the standard bearer in conceptualizing the stages of change in therapy. The need to modify the Prochaska and DiClemente model of change has come out of our own experiences in working with patients with a variety of mental health issues. The addition of these new stages reflects the experiences of clients and therapists both in and out of the therapeutic process. The original model has guided not only our therapy but our research as well. We now face times of increasing scrutiny of our therapeutic process and a reliance on research-based outcome evaluation. This increased scrutiny requires us to provide models with more precision to truly describe what we do and how we do it. The development of this expanded model of change was designed to fulfill that very purpose of more precision. This model will hopefully provide the clinician, the researcher, the third party payer and ultimately the patient with a more experience-centered focus from which to make their decisions.

And Athena sprang whole and fully
formed from the head of Zeus . . .
—*The Creation of the Gods*

House built on a weak foundation
will not stand, oh no.
Story's told through all creation,
will not stand, oh no.
—Classic Calypso song

MANY PATIENTS come to therapy in pain from intrapsychic or interpersonal problems. They want relief or surcease as quickly as possible. These patients (and ofttimes their therapists) see the need and the possibility for the psychotherapeutic collaboration to immediately move toward change. This is especially true in the "short-term" or "time-limited" therapies, as opposed to the more traditional longer-term therapies. A therapist working within the time limits of brief therapy may use a more technico-mechanical approach, attempting to quickly move the patient to change before the necessary base for change has been built. The therapy may, in effect, try to have the patient run before the patient has learned to crawl and walk. Whether short-term or time-unlimited, therapy occurs in a series of developmental stages. These stages, like life, are regular, identifiable, and predictable. For some patients, change may be implemented more quickly than for other patients, who require a greater focus on the preparation for change before the change can occur.

Stage theories have been central to psychological thinking about development since the earliest days of psychotherapeutic conceptualizing (Erikson, 1963; Freud, 1910; Kohlberg, 1963; Maslow, 1968; Piaget, 1966). All stage theories suggest that the successful resolution of a stage generally brings with it the expectation that the individual has gained certain coping skills that can then be used in the encounters with other later stages or crises throughout life.

Why people change and why they do not change is a question that therapists have asked for many years. Some patients are better able to make use of life experiences (including the therapeutic experience); others have great difficulty learning from life circumstances and experiences. The term *resistance* has too often been used as an explanation for why individuals do not change in therapy. The implication in the term and concept of resistance is that (a) the patient has chosen not to change, (b) the individual has too much to gain from not changing what they do, or (c) unconscious forces or conflicts mitigate against the individual changing. These formulations of resistance are, at best, unsatisfactory, and at worst, blame the patient for not doing what the world, including the therapist, expects of them. While patients may indeed be resistant or noncompliant with therapeutic regimen, a far more satisfying view for what impedes change is described in the stages-of-change literature. This literature describes change as happening in a series of specified and predictable steps. The therapist who is aware of the steps can identify the particular stage a patient is at when they enter therapy and therefore adapt treatment to the patient's level of motivation, interest, and readiness to change.

Among the most frequently cited, quoted, or referred

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to literature on stages of change are those that make direct reference to the work of Prochaska and DiClemente (Prochaska & DiClemente, 1982; Prochaska, DiClemente, & Norcross, 1992). Many other citations allude to general issues related to change or in some way derive from, or are attempts to apply, the Prochaska and DiClemente model to a range of patient populations and clinical settings (Blume & Schmaling, 1997; Cole, Leonard, Hammond, & Fridinger, 1998). The Prochaska and DiClemente model has been used in a variety of settings and applied to a wide variety of psychological and psychosocial issues (e.g., Prochaska, Redding, Harlow, Rossi, & Velicer, 1994). It has become, in fact, a standard model in the treatment of addictions (Miller & Heather, 1986).

Several authors have reconceptualized the process of change in individual psychotherapy from the perspective of dynamic systems theory (Caspar, Rothenfluh, & Segal, 1992; Greenberg, Rice, & Elliott, 1993; Mahoney, 1991; Schiepek, Fricke, & Kaimer, 1992). The components of these theories are not new. They have, in fact, been presented in different literatures with a variety of labels and associated theories of change. Mahoney offers a theoretical model that is comprehensive and describes convergence on a number of important points. According to dynamic systems theorists (Caspar et al.; Greenberg et al., 1993; Mahoney, 1991; Schiepek et al.), psychological growth is a lifelong process characterized by periods of stability and instability. Psychopathology, as is any state of being, is viewed as a state of dynamic equilibrium, where the predominant state consists of well-organized patterns of cognitive/affective/behavioral and somatic functioning that interfere with the individual's well being and everyday adaptive functioning (Mahoney, 1991). Destabilization is viewed as a necessary and natural process that allows for growth and change. It is through this "shaking up" process that change can occur. Mahoney described destabilization as a period of system-wide disorder marked by increased variability in such domains as thought patterns, affect, behavior, intimacy, sleep, appetite, and somatic functioning. Given the organism's natural movement toward stability and balance, the system in disorder will attempt to move toward order.

Patterns can become so well established that they become defining factors and are considered lifestyles (Schiepek et al., 1992). Because they provide structure and meaning to the individual's life, stabilizing forces maintain these patterns, even if the existing system does not function optimally or adaptively. The individual's short-term relief or comfort may be the deciding factor in choosing a particular behavior. For example, agoraphobics pay the price of being apart from activities, events, and other people by virtue of their seeming inability to comfortably leave their homes. The price (avoidance) that is paid, however, brings about temporary relief from the anxiety related to leaving a place of safety and entering a field of danger.

These possibly avoidant life strategies and self-protective mechanisms must be overcome before change can occur, and thus they influence the pacing and direction of change (Mahoney, 1991). It is perhaps for this reason that patient self-protection (often called resistance or leading to noncompliance) is a well-documented predictor of negative outcomes in psychotherapy (Beutler, Sandowicz, Fisher, & Albanese, 1996; Hanna, 1996; Orlinsky, Grawe, & Parks, 1994). To decrease this potentially self-destructive self-protection, the therapist must provide a secure and safe environment that fosters the therapeutic process. The therapy can be designed to augment the patient's skills, strengths, and self-esteem while developing more effective and efficient coping resources and social support, leading to a greater sense of hope (Hanna).

> While patients may indeed be resistant or noncompliant with therapeutic regimen, a far more satisfying view for what impedes change is described in the stages-of-change literature.

Change occurs by first using old, well-established patterns of behavior (assimilation), and if these more practiced behaviors do not work, by making small incremental changes (accommodation). Ideally, the therapist can guide and shape the accommodations by providing the setting (a safe one), the skills (increased repertoire of techniques), and the support (encouragement of risk taking). According to Mahoney (1991), the therapist needs to assess and then enhance the client's readiness for change. Providing a secure, supportive therapeutic environment and strengthening internal and external resources can prepare the patient to undergo destabilization or a movement from one stage of change to another (Casper et al., 1992; Greenberg et al., 1993; Schiepek et al., 1992).

In considering new levels in the stages of change, further understanding of the self-protection process may shed light on when movement through the stages will be delayed or stopped, and when it will result in decompensations, minor changes, or major movement toward more adaptive patterns.

The study of psychotherapy introduces a new level of complexity to the modeling of change because it involves changing long-standing and pervasive patterns, or lifestyles, rather than a single cell, neuron, or developmental task. In Mahoney's (1991) dynamic systems perspective, it is natural and healthy for an individual to resist moving too far and too quickly beyond familiar patterns, even if those patterns interfere with functioning and cause distress. Freeman and Leaf (1989) use the metaphor of a safety zone in explaining the change-related discomfort or avoidance phenomenon. Normally, each individual lives

in a safety zone. This zone may be broad and may interconnect with the safety zones of others. The boundaries of the safety zone are often fairly well defined. For some individuals, the limits of the safety zone may be the walls of their house or the fence in the front yard. Anything outside the safety zone is labeled by the individual as "dangerous" or "threatening" and the approach to the boundary of the safety zone will elicit a withdrawal, avoidance, or safety-seeking response. If the individual stays well within the safety zone, there will be a minimum of anxiety.

For other individuals, the safety zone is more limited so that movement in certain directions will more quickly approach the boundary of the safety zone and bring the individual closer to perceived danger and likely withdrawal or avoidance.

It is natural and healthy for an individual to resist moving too far and too quickly beyond familiar patterns, even if those patterns interfere with functioning and cause distress.

For a third group of individuals, their safety zone is so limited that virtually any direction they turn will bring them to the edge of their perceived safe space and the concomitant increase in perceptions of danger and the related anxiety.

The therapeutic goal becomes to move the patient through a series of changes that allow them to begin to expand their safety zone.

The original stages-of-change research identified five stages of change (Prochaska & DiClemente, 1982). But analyses of the continuous measure of stages consistently found only four scales (McConnaughy, DiClemente, Prochaska, & Velicer, 1989; McConnaughy, Prochaska, & Velicer, 1983). This was misinterpreted to mean that there were only four stages. For 7 years, Prochaska and DiClemente worked with a four-stage model, omitting the stage between contemplation and action (Prochaska & DiClemente, 1983, 1985). Recent research has supported the importance of assessing *preparation* as a fifth stage of change (DiClemente et al., 1991; Prochaska & DiClemente, 1992). Precursors of this stage model can be found in the writings of Horn and Waingrow (1966), Cashda (1973), and Egan (1975). Variations of, and alternatives to, Prochaska and DiClemente's stage model can be found in the writings of Beitman (1986), Brownell, Marlatt, Lichtenstein, and Wilson (1986), Dryden (1986), and Marlatt and Gordon (1985).

Prochaska et al. (1992) describe their model as follows: *Precontemplation* is the stage at which there is no intention to change behavior in the foreseeable future. Many individuals in this stage are unaware or underaware of their problems. Families, friends, neighbors, or employees, however, are often well aware that the precontemplators have problems. When precontemplators present for psychotherapy, they often do so because of pressure from others.

Contemplation is the stage in which people are aware that a problem exists and are seriously thinking about overcoming it but have not yet made a commitment to take action.

Preparation is a stage that combines intention and developing behavioral criteria for what the change would look like. Individuals in this stage are intending to take action in the next month and have unsuccessfully taken action in the past year. As a group, individuals who are prepared for action report some small behavioral changes (DiClemente et al., 1991).

Action is the stage in which individuals modify their behavior, experiences, or environment in order to overcome their problems. Action involves the most overt behavioral changes and requires a considerable commitment of time and energy.

Maintenance is the stage in which people work to prevent relapse and to consolidate the gains attained during the action stage. Traditionally, maintenance was viewed as a static stage. However, maintenance is a continuation, not an absence, of change. For some behaviors, maintenance can be considered to last a lifetime. Stabilizing behavior change and avoiding relapse are the hallmarks of maintenance.

Prochaska (1991) believes that a person's stage of change provides proscriptive as well as prescriptive information on treatments of choice. They see action-oriented therapies as being quite effective with individuals who are in the preparation or action stages. These same programs may be ineffective or detrimental, however, with individuals in precontemplation or contemplation stages. They believe that it is critical to assess the stage of a patient's readiness for change and to tailor the therapeutic interventions accordingly. A more explicit model would enhance efficient, integrative, and prescriptive treatment plans.

This step of assessing stage and tailoring change is rarely taken in a conscious and meaningful manner by self-changers in the natural environment. Self-changers are more likely to use explanatory phenomena such as vague notions of willpower, luck, mysticism, and biotechnological revolutions to describe their perspectives on self-change (Mahoney & Thoreson, 1972). Prochaska and DiClemente (1992) have determined that efficient self-change depends on doing the right things (processes) at the right time (stages). In addition, it requires being able to involve the right people or supports, and having the situations or circumstances support the proposed and eventual change.

The need to modify and further specify the Prochaska and DiClemente model of change has come out of our own experiences in working with patients with a variety of mental health issues. The proposed modification is consistent with a cognitive behavioral orientation that is highly specific and prescriptive. We believe that the

Prochaska and DiClemente model is a dynamic process, which allows for enhancements, as needed, to more accurately reflect the actual state of practice today. The addition of new stages will, we believe, reflect the need to account for the experiences of clients and therapists both in and out of the therapeutic process and to further explicate the change process (Table 1).

Revised Stages of Change

The revised stages-of-change model is built on the same platform as the original model. Change occurs in a series of specified stages. The therapist must assess the patient's stage as part of the initial evaluation. It is from this point that the treatment plan will be initiated. A description of the revised stages follows.

Noncontemplation

Noncontemplation is the stage of change in which an individual is not considering or even thinking about changing. They often seem oblivious to their need to change, the effect that their behavior has on others, or the fact that their global level of functioning is considerably less than it might be were they more attentive or cognizant of the need to change.

Case 1. Mary was referred for therapy by an employee-assistance counselor at her place of work. She reported frequent headaches that impaired her concentration on the job and at home. In reviewing her medical history, it was discovered that she had not had a medical checkup for several years, nor had she had her eyeglass prescription revised in several years. She had assumed that since she could generally see well, could read, and drive, that her prescription was adequate for the new visual tasks she was required to perform, including computer use. An eye examination led to a change in prescription and a medical examination led to a revision in a medication change. The headaches stopped almost immediately.

Table 1
Revised Stages of Change

Prochaska, DiClemente & Norcross (1992)	Freeman and Dolan (2001)
xxx	Noncontemplation
xxx	Anticontemplation
Precontemplation	Precontemplation
Contemplation	Contemplation
Preparation	Action planning
Action	Action
xxx	Prelapse (Redirection)
xxx	Lapse (Redirection)
xxx	Relapse (Redirection)
Maintenance	Maintenance

Patients at this point are not actively avoiding, resisting, or opposing change. They simply have not considered it, and may be willing to work on change when it is made manifest or obvious by the therapist. The key statements by the patient are, "I don't think that I need to change" or "I was not aware that change was necessary." This case represents the noncontemplative stage in which the patient comes in to deal with one issue but has not processed other issues under the heading of areas of personal difficulty. They may, in fact, be ready to consider or think about other problems as needing attention.

> The need to modify and further specify the Prochaska and DiClemente model of change has come out of our own experiences in working with patients with a variety of mental health issues.

Anticontemplation

Anticontemplation involves the process of becoming reactive and violently opposed to the notion of needing to change. This is a response often seen in individuals mandated for therapy by the courts, or required to come to therapy by family or significant others. Most simply, it is stated by the patient as, "Fuck you! I don't want to be here, you can't make me change, and I think that I'm fine just the way that I am," or, "I refuse to change or don't want to change."

Case 2. Bob, age 16, was referred for treatment after being caught coming to a school function while under the influence of alcohol and possibly other drugs. Bob denied any problem with alcohol and stated that his only problem was that someone told the principal that he was coming to the dance and that he had been drinking. When confronted, Bob stated that he had no problem, that everyone "did it," and that he was being singled out unfairly. He became quite angry and felt that everyone was overreacting to what he characterized as "normal behavior."

Before the next session, Bob stole his older brother's ID so that he could purchase a keg of beer for a party. When confronted, Bob again became angry and said that this had nothing to do with his alcohol use and that his only problem was in getting caught. Bob started yelling at his parents for their own drinking behavior. When his therapist suggested that all of these incidents involved his use of alcohol, he again stated that alcohol was not a problem. He refused to talk about it further.

Patients at this point are actively avoiding, resisting, or opposing change. They are most often unwilling to work on change and expend great energy on blaming others for their current difficulties. The key statements by the patient are, "I don't need to change" or "Others should

be nicer to me and then I would not have to change." This case represents the anticontemplative stage, in which the patient comes in against his or her will, under duress or threat.

Precontemplation

Precontemplation is the stage of change when a person begins to consider the consequences, purpose, and the possibility of change. A metacognitive state wherein the patient is thinking about thinking about change, the prototypical internal statement is, "I may really need to consider the possibilities of doing something differently than I do it now."

Case 3. Lara, a 27-year-old woman, was referred for therapy by the court. She had been arrested for the fourth time for driving with a suspended license. One possibility was that she would be sentenced to 6 months in jail as a chronic offender. Given that she was a single mother with few resources to call upon to care for her child, the judge gave her a choice of jail or therapy. As is often the case, she chose therapy.

She started therapy in an almost apologetic manner and offered all of the excuses for why she kept "forgetting about this license thing." When the therapist kept coming back to the consequences of her driving with a suspended license, testing Lara's consequential thinking and assessing her problem-solving ability, she finally stated, "Okay. I guess I'm not going to be able to bullshit my way out of this. Let's go for it. What do I need to do?"

Patients at this point are not actively considering the possibilities of changing, nor are they invested in avoiding, resisting, or opposing change. They simply have not considered it, and may be willing to consider the possibilities for change when it is made manifest or obvious by a significant other, a friend, or a therapist. The key statements by the patient are, "I guess it might be worthwhile to consider change" or "I was not aware that change was necessary, but now that I do, I need to do something." Many patients come for therapy at this point. They are ready to consider or think about the consequences of change.

Contemplation

Contemplation is that point in the change process when a person is directly and actively considering change. The patient has reached a point of readiness to engage in the change process.

Case 4. Jessie was a 17-year-old white female referred to treatment after telling her parents that she was addicted to heroin and wanted to stop. Jessie had been using heroin since the age of 15. She admitted to snorting heroin on a daily basis and that her use had escalated from a couple of lines a day to nine bags a day. She had been able to stop for a maximum of 2 days, but was unable to stop for a longer time than that. Jessie stated that she had a family history of addiction and that a maternal aunt died of a heroin overdose 2 years ago. Her parents were supportive of Jessie but they found it difficult to follow through with treatment recommendations if Jessie objected to them. Jessie and her parents became tearful during the initial session as they talked about the death of her aunt. Jessie was unable to understand why, if she wanted to quit so badly, she was unable to do so.

During sessions, it became obvious that Jessie did not have adequate coping skills for simple daily problems, let alone the skills to cope with the emotional and physical turmoil of ceasing the use of heroin. Jessie's strength was her intelligence, evident in the fact that she maintained an honor's status in high school, despite her addiction to heroin. Jessie, though cognitively and emotionally committed to change, lacked the skills at this point to make the behavioral change needed to follow through.

Patients at this stage are actively considering change. The therapy goal is to help them consider what they might be able to do. The key statements by the patient are, "I think that I need to change" or "Change is necessary." Patients who enter therapy at this point can be moved easily to the planning stage.

Action Planning

Action planning is the stage of change when the therapist and patient have collaboratively developed a treatment focus and treatment plan. The therapeutic process has begun and the patient is beginning to make plans on how change will occur. The key phrase with this group is, "I plan to change."

Case 5. Sam, a 19-year-old college student, came to therapy stating, "I need to study and can't seem to do it all. When I was in high school I didn't need to study. I breezed right through without cracking a book. Now I'm getting C's and D's and can't seem to get it together to study and do the papers. I end up overwhelmed and then sit around and watch television, even when I know that I need to be studying." Sam needed a plan. He needed a road map.

Patients at this point are actively willing to plan change. They have considered it, and are ready to feel, act, or think differently. The key statements by the patient are, "I think that I need to change and need to figure out a way to do it" or "I was not aware that change was necessary, but now that I am, what do I do?" This case represents the action-planning stage, in which the patient has to make decisions about changing.

Action

Action is the stage marked by behavioral progress toward change. One patient described the difference as having shifted himself from neutral to drive.

Case 6. Jose was a 43-year-old male referred to outpatient treatment by his Educational Assessment Program after requesting assistance to deal with his substance abuse. Jose has been in treatment several times over the last 15 years to deal with this problem. He admitted that he had not been ready for change at those times. However, he reported feeling that he had reached a point in his life where if he didn't change he would probably end up dead. He entered treatment approximately 3 months earlier and was diagnosed as chemically dependent to cocaine. Jose had been abstinent for the past 45 days and was attending 12-step support group meetings along with individual and group counseling. He had returned to work about a week earlier and he reported that he was able to perform his work at an adequate level. He continued to monitor his thoughts and behaviors and maintained a journal so he could use them in his therapy sessions.

Patients at this point are actively working at implementing change. They are considering various aspects of change and, with the therapist, working in a multimodal way to deal with thoughts, feelings, actions, and situations. The key statements made by the patient are, "Change is hard, but I have to do it" or "What do I have to do next?" This case is representative of the action stage: The patient is actively motivated and engaged in change.

Prelapse

Prelapse is a point in the change process characterized by active and often overwhelming cognitions related to the reversal of the changed behavior. There has not, to this point, been an active reversal of behavior. A crucial juncture in the change process, active, directive disputation, problem solving, and the review of cognitive and behavioral skills can short-circuit the prelapse before it leads to the old behaviors.

Case 7. Roy had decided to lose weight. After many different diets, false starts, and failure, the death of a friend was, in his words, "a wake-up call." He began to diet and exercise, and within 3 months had achieved a weight loss of 23 pounds. He felt better, garnered compliments from colleagues and coworkers, and was able to fit into clothes that he had not worn in many years. His energy level was high and he was able to engage in physical activities that he had not tried in years. Yet despite these benefits and positive changes in his life, he began having thoughts such as, "I deserve some reward for losing this weight—something like a large slice of chocolate cake"; "This is too much work"; "Why should I have to do this?"; and "There are fat people who live long, healthy lives."

In the prelapse stage, an individual engages in thoughts, desires, even cravings for the "old" times and old behaviors. The patient might think, "Is this worth it?" or "The old times weren't *that* bad."

Lapse

Lapse is a stage where the skills needed to maintain the action stage decrease or are ignored and the changes developed in therapy begin to decrease. Although there has not been a full return to pretreatment behavior and affect, the processes are in place for relapse to occur. In cognitive terms, it is a return to the old thinking, perceptions, and actions that put the person at risk for difficulty in the first place. The patient ends up questioning if the changes are real or even beneficial to continue.

In the prelapse stage, an individual engages in thoughts, desires, even cravings for the "old" times and old behaviors.

The lapse process, which we see as a central focus for the therapy work, could be broken down into a similar stage model, as follows:

1. Noncontemplative relapse: "I didn't know that I had to pay attention to what was happening."
2. Anticontemplative relapse: "I'm tired of having to watch what I say and do."
3. Precontemplative relapse: "I need to think about how I keep sliding back into the same old patterns."
4. Contemplative relapse: "How can I stop doing all of the things that have screwed me up in the past?"
5. Relapse planning: "I need a system to get this under control."
6. Relapse: "Oh, God. I'm doing it again."
7. Relapse prevention: "I need to start going to the meetings again and using the thought sheets."

Case 8. Harold, age 28, had been in recovery for 6 months after a 15-year addiction to heroin. He started his recovery with a strong commitment to "stay clean" and followed the therapeutic action plan to ensure stability over the past few weeks. He reported that he had been missing meetings and that he had missed two out of his last five counseling sessions. Harold stated that he had good excuses for not being able to attend but he was fearful that he was slipping back into old patterns and would like to stop the process before he returned to active drug use.

At this point in treatment, Harold needed to recommit to his recovery and develop some new motivational skills to maintain his change. Therapy consisted of skill building and cognitive restructuring of old coping skills that had reemerged. Harold referred to these sessions as "fine-tuning" the changes in the action stage to allow for healthy maintenance of the new behaviors.

Though patients at this point are actively working on *changing*, at the same time they are starting to revert to previous patterns of action—actions that were, in part, responsible for their need to seek therapy in the first

place. They are not actively avoiding, resisting, or opposing change; rather, they have become careless and have stopped being as astute a monitor of self and others, or have stopped using the techniques that they have learned in therapy. They are also going through a natural rejection of the new behavior. The key statements by the patient are, "I don't know why I am slipping back" or "Therapy doesn't work. I'm doing what I once did." This case is representative of the lapse activation stage in which the patient is starting to experience difficulty.

Relapse

Relapse is a return to the behaviors that were the cause of the original referral and that were, ideally, altered in the action stage. This is a critical stage in the change process in that the definition of addiction includes the probability of relapse as one of its components. The relapse stage is usually a crisis stage for most patients. Immediate intervention is crucial in order for the patient to continue progressing in the change process. The patient states, "I'm right back where I started from."

The relapse stage is usually a crisis stage for most patients. Immediate intervention is crucial in order for the patient to continue progressing in the change process.

Case 9. Lynn, aged 38, had been in recovery for 2.5 years. She initiated counseling after she had been arrested for driving under the influence of alcohol (DUI) after a friend's wedding. Lynn was very upset by the fact that she drank at all and was extremely concerned at how quickly she had returned to her old drinking levels. At this point, Lynn was torn between feeling depressed and believing that she was a failure and might as well continue drinking since that was all she was worth. The treatment commenced with the goal to stabilize Lynn and get a commitment to sobriety; treatment then targeted working on the beliefs that were represented in the two opposing views of herself.

Patients at this point have slipped back into their "old ways" to a greater or lesser degree. They need to start to change once again. The key statements by the patient are, "I need to get out of this hole" or "I was not aware that change needed all of this continued work." This case represents the relapse stage in which the patient reexperiences the difficulty.

Redirection Process

Redirection is a process that must be implemented upon the initial lapsing that begins with the prelapse stage. It must also be implemented after the lapse stage and right after the crisis of relapse where new skills and cognitions must be developed and old skills practiced to ensure continued recovery. The question that the patient asks is, "How can I get back on track?"

Case 10. Jamie, age 22, returned to treatment after a recent hospitalization, a result of discontinuing her medication for depression and a concomitant return to drinking. During her hospitalization, she realized the need to continue taking the antidepressant medication and also the dangerous results that can occur with the combination of precipitously withdrawing medication and drinking at the same time. Jamie needed to explore her beliefs surrounding her medication use and the continued belief that she was invincible to the effects of alcohol. At this point in therapy, the process of redirecting Jamie back to healthy beliefs about self and her illnesses was critical to treatment success.

Patients at this point are actively working to overcome the relapse. The patient is willing to work on change and to continue to move ahead. Key statements by the patient are, "I think that I now see the light at the end of the tunnel" or "I was not aware that change was so easily taken from me and that continued work is going to be necessary." This case is representative of the redirection process in which the patient decides to move ahead. The patient may, at this point, be ready to consider other problems as needing attention.

Maintenance

Maintenance is the final stage in the continuous process of maintaining and developing the skills of the previous stages. The goals are to (a) fine-tune and adjust changes, (b) support growth, (c) encourage stability, and (d) help the patient be his or her own therapist.

Case 11. Ryan, age 24, began his treatment for addiction at the age of 15. He had received inpatient treatment and outpatient counseling for approximately 1.5 years. He completed formal treatment at the age of 18 and had returned to treatment for short periods (one or two sessions) in the years following on an as-needed basis. A high-school graduate, Ryan enjoyed his full-time job and was in line for a managerial position. He was happily married, and expected a child within the next 6 months. He had maintained his sobriety for the last 8 years.

Ryan returned to treatment because he felt that he needed to develop some additional skills to deal with the different kinds of stress in his life. He was keenly aware that if he was unable to learn new and healthier skills that relapse was always a possibility.

Ryan had been able to reach this point in his recovery through his belief that staying sober proved he was a competent person, but as he moved further into the business world, with less emotional support of other recovering people, Ryan found himself questioning his own compe-

tence to succeed. At this stage, Ryan needed to focus on expanding the skills that allowed him to stay sober this long and to develop new skills to adequately cope with the new challenges (job and child) in his life.

Patients at this point are working actively to maintain and build upon what they have learned and earned in therapy. Sensitive to the cues relative to relapse, they have learned to use a broad range of techniques to deal with discomfort or dysfunction, and have become their own therapist. The key statements by the patient are, "I need to always keep my eye on the need to change" or "I must be aware that change is necessary." This case is representative of the maintenance stage, in which the patient has terminated therapy and is, ideally, prepared to consider problems that need attention in the future.

Discussion

Initially, the process of change was conceptualized as a linear journey wherein individuals progressed simply and discretely through each stage. Linear progression is, in fact, a possible but relatively rare phenomenon, whether with addictive behaviors or any other form of psychopathology. Therapists and patients are often guided by the simplistic notion that a straight line is the shortest distance between two points. The patient enters therapy with problems of either short or long standing, or a combination of both (e.g., reactive difficulty superimposed on more chronic and characterological problems). If the therapist thinks of starting at one point and charting a straight and even course toward "cure," the therapy will invariably fail. It would be essential to view the stages-of-change process as a step-wise or competency-based model. It is difficult, though not impossible, to move from one stage to another without fully and completely mastering the previous stage. Similarly, an individual can move from one stage to another, skipping an intermediate stage. For example, a patient might move from noncontemplation to action planning (e.g., "Gosh, I never realized that. I better do something immediately. Where can I start?"). Or, a patient may move back two steps and see the partial retreat as the end of the change process (e.g., "I ate a whole chocolate ice cream sundae. I might as well eat everything in the refrigerator").

The expansion of the change process represents a fluid and dynamic model that allows for the full range of patient issues and is constantly evaluative of the patient's skills and motivation. The process of identifying a phase of change such as anticontemplation requires the therapist to enter into a truly collaborative process by starting where the client is: allowing patients to begin the therapeutic work from the stage in which they perceive themselves to be (including their motivation) as well as the external expectations from others.

This model enhances that process with the inclusion of steps to identify both motivational and realistic assessments of the patient's abilities and the steps necessary to facilitate the change process into a long-standing lifestyle coping process. We incorporate a process that accommodates the reappearance of not only old behaviors but also the cognitive process that initiates that change. The ability to intervene in the thought process prior to relapse by educating the patient to the existence of relapse and teaching effective recognition and coping strategies to deal with all of its components is of great value to the patient. By warning a patient of the possibility for relapse, it becomes an expected part of therapy, not a failure that sneaks up on the patient. The use of a dynamic model that more closely reflects the actual process and experience of both patients and therapists will provide a complete structure for the research and outcome evaluation of all aspects of the change process, from first contact to termination or later tune-up session. The inclusion of noncontemplation, anticontemplation, prelapse, lapse, and relapse stages presents a more comprehensive and, by far, more relevant model to front-line therapists and to patients that is reflective of their true experience.

By warning a patient of the possibility for relapse, it becomes an expected part of therapy, not a failure that sneaks up on the patient.

The change process is more of a spiral through the stages than a straight line. Each of the individual change states will, in the course of therapy, be revisited many times, often within the same session. The therapist must be aware of the potential for the spiral and to accommodate the therapy to that possibility.

Clinical Example

Darrin was initially interviewed as part of a grand rounds presentation of a person with an antisocial personality disorder. He was addicted to drugs, had been convicted of selling drugs, and was awaiting sentencing. When asked by the interviewing psychologist why he was in this situation, Darrin replied, "I'm here because of a fucked-up system. There are many countries where using and selling drugs is legal." When asked which countries those might be, Darrin listed Denmark and the Netherlands. "You can buy drugs anywhere in Amsterdam. Nobody hassles you. In those countries I would be a successful businessman, not a criminal. There's nothing I did. I needed a good lawyer to show the fucking courts what this is all about."

When asked if there was anything that he thought he could work on in therapy, Darrin replied, "No. I need to get out of going to jail."

Darrin started therapy from the point of anticontemplation. He had little motivation to change. He had, by his report, been successful at avoiding spending any time in jail by smooth talk and glib promises to judges. This situation was no different.

A court-appointed attorney arranged a plea-bargain to place Darrin on probation, which included random urine checks to limit Darrin's drug use, and to have Darrin go to therapy on a weekly basis.

The initial goal of therapy was to help Darrin entertain the possibility of potentially considering the need to alter, in some small ways, his approach to problem solving.

This was addressed by trying to facilitate Darrin's move from anticontemplation to precontemplation. One technique was to encourage Darrin to consider the advantages and disadvantages of changing.

When presented with the therapy requirement, Darrin first protested that forcing him to come to therapy was an infringement of his constitutional rights. When presented with the advantages—for example, taking advantage of the therapist as an expert in behavioral change—Darrin became interested in learning to change other people's behavior. The key to interesting Darrin in therapy was an appeal to his narcissism.

Each of the individual change states will, in the course of therapy, be revisited many times, often within the same session.

Darrin was then directed to contemplate a change in how he did things. He began by considering two areas: his drug use and his difficulties in interpersonal relationships. Both areas were couched by the therapist in terms of changing others. Darrin's first interest was in "changing" Anna, his girlfriend. His goal was to have her be more sexually available to him and for her to cook dinner for him on a regular basis. The therapist collected data relative to how Darrin interacted with his girlfriend, the nature of their verbal, physical, and sexual interaction. What was clear was that Darrin's manner of getting Anna to do what he wished was to demand, threaten, or insult her. When asked whether he had ever considered other alternatives, Darrin seemed baffled. "Like what?" he asked. When the therapist suggested that there were some other ways that Darrin might try to get more (food and sex) of what he (Darrin) wanted, Darrin wanted more information. The therapist suggested that Darrin might use other ways to get Anna to be "nicer" to him. Again, Darrin seemed baffled. "Like what?" he asked.

Using a Socratic dialogue, the therapist inquired, "Do the insults work?"

"Not as well as they should," replied Darrin.

"Would you be willing to try something that may have greater success at getting what you want?"

This intrigued Darrin inasmuch as many of his schema related to the theme of "getting" more of what he wanted. This intrigue led to Darrin being open to trying other ways of dealing with Anna.

This was the entrée to his contemplation of other behaviors.

The therapy then involved Darrin evaluating his behavior and broadening his repertoire. This would include a more prosocial stance toward Anna. He tried bringing her gifts and found that when he withheld negative action and was more affectionate, she responded in a way that was more of what he said he wanted from her.

The action planning and action stages were used to gather data.

Therapy ended at about this point because Darrin was rearrested for selling drugs. This time, he was sentenced to spend time in jail.

Summary

For almost 2 decades, one model of change has represented the standard in conceptualizing the stages of change in therapy. The Prochaska and DiClemente transtheoretical model of the change process has guided not only our therapy but out research. As the field, and, in particular, our therapeutic process, faces increased scrutiny, the importance of research-based outcome evaluation is vital to our efficiency and to the quality of care we provide to our clients. This increased scrutiny demands of us that we provide models with more precision to truly describe what we do and how we do it. The development of this expanded model of change was designed to fulfill that very purpose.

The majority of our skill as clinicians lies not only in the facilitation of behavioral change but in motivating and assisting people to move toward change. These skills and change processes have been difficult to identify in the past and were thrown into the vague category of "rapport." We now have the opportunity to explore this process by identifying it and expanding on the stages to deal with true clinical experience.

A second area, relegated to the vague therapeutic realm known as "aftercare" or "supportive therapy," needs to also have more precision as to its role in the change process. The concept of lapse activation is needed to explain what happens when we make change: that the person or organism initially goes through a rejection of these new behaviors, similar to a body going through the rejection of transplanted parts. As therapists, we do not have powerful antirejection drugs that prevent or delay this process. We need to include this rejection or a return to the previous homeostasis in our treatment process until we have incorporated a new homeostasis with the new behaviors. This process of rejection of change—lapse activation—is not included in outcome-based treatment protocols, nor is it a recognized goal in the managed care treatment. Once again, what we actually do in therapy is not recognized.

Failure to take into account the lapse-activation process will almost certainly guarantee the progression to the next stage: relapse. This process is similar to an action stage, where old behaviors are now used instead of the new, more adaptive behaviors. Relapse has been a defining characteristic in the addiction field and is the result of many of our clients "giving up" in therapy. By including it in the change process, we seek to not only normalize this process but aid in its prevention by intervening in the lapse-activation stage.

Redirection and maintenance are viewed as short-term processes or tune-ups that occur over the patient's long-term change process. These stages do not require intensive or extensive treatment to achieve goals; rather, they would ideally require only one or two sessions to help redirect the patient in the change work they had previously achieved, or expand on old skills when new or novel problems come into play.

This model will hopefully provide the clinician, the researcher, the third-party payer, and, ultimately, the patient with a more experience-centered focus from which to make decisions. It is with gratitude to Prochaska and DiClemente that we present this model as an expansion and a refinement of their exhaustive work in the area of change process.

References

Beck, A., Steer, R., Ball, R., & Ranier, W. (1996). Comparison of Beck Depression Inventories–IA and II in psychiatric outpatients. *Journal of Personality Assessment, 67,* 588–597.

Beitman, B. D. (1986). *The structure of individual psychotherapy.* New York: Guilford Press.

Beutler, L. F., Sandowicz, M., Fisher, D., & Albanese, A. L. (1996). Resistance in psychotherapy: Conclusions that are supported by research. *In Session: Psychotherapy in Practice, 2,* 77–86.

Blume, A. W., & Schmaling, K. B. (1997). Specific classes of symptoms predict readiness to change scores among dually diagnosed patients. *Addictive Behaviors, 22,* 625–630.

Brownell, K. D., Marlatt, G. A., Lichtenstein, E., & Wilson, G. T. (1986). Understanding and preventing relapse. *American Psychologist, 41,* 765–782.

Cashdan, S. (1973). *Interactional psychotherapy: Stages and strategies in behavioral change.* New York: Grune & Stratton.

Caspar, F., Rothenfluh, T., & Segal, Z. V. (1992). The appeal of connectionism for clinical psychology. *Clinical Psychology Review, 12,* 719–762.

Cole, G., Leonard, B., Hammond, S., & Fridinger, F. (1998). Using "stages of behavioral change" constructs to measure three short-term effects of a worksite-based intervention to increase moderate physical activity. *Psychological Reports, 82,* 615–618.

DiClemente, C. C., Prochaska, J. O., Fairhurst, S. K., Velicer, W. F., Velasquez, M. M., & Rossi, J. S. (1991). The process of smoking cessation: An analysis of precontemplation, contemplation, and preparation stages of change. *Journal of Consulting and Clinical Psychology, 59,* 295–304.

Dryden, W. (1986). Eclectic psychotherapies: A critique of leading approaches. In J. C. Norcross (Ed.), *Handbook of eclectic psychotherapy.* New York: Brunner/Mazel.

Egan, G. (1975). *The skilled helper: A model for systematic helping and interpersonal relating.* Monterey, CA: Brooks/Cole.

Erikson, E. (1963). *Childhood and society.* New York: Norton.

Freeman, A., & Leaf, R. C. (1989). Cognitive therapy applied to personality disorders. In A. Freeman, K. M. Simon, L. F. Beutler, & H. Arkowitz (Eds.), *Comprehensive handbook of cognitive therapy* (pp. 403–433). New York: Plenum Press.

Freud, S. (1910). The origin and development of psychoanalysis. *American Journal of Psychology, 21,* 181–218.

Goldin-Meadow, S., & Alibali, M. W. (1995). Mechanisms of transition: Learning with a helping hand. *Psychology of Learning and Motivation, 33,* 115–157.

Greenberg, L. S., Rice, L. N., & Elliott, R. (1993). *Facilitating emotional change. The moment-by-moment process.* New York: Guilford Press.

Hanna, F. J. (1996). Precursors of change: Pivotal points of involvement and resistance in psychotherapy. *Journal of Psychotherapy Integration, 6,* 227–264.

Hayes, A. M., & Strauss, J. S. (1998). Dynamic systems theory as a paradigm for the study of change in psychotherapy: An application to cognitive therapy for depression. *Journal of Consulting and Clinical Psychology, 66,* 939–947.

Horn, D., & Waingrow, S. (1966). Some dimensions of a model for smoking behavior change. *American Journal of Public Health, 56,* 21–26.

Kelso, J. A. S., Ding, M., & Schoner, G. (1993). Dynamic pattern formation: A primer. In L. B. Smith & F. Thelen (Eds.), *A dynamic systems approach to development: Applications* (pp. 13–50). Cambridge, MA: MIT Press.

Kohlberg, L. (1963). Moral development and identification. In H. W. Stevenson (Ed.), *Child psychology* (pp. 277–332). Chicago: University of Chicago Press.

Kuhn, D. (1995). Microgenetic study of change: What has it told us? *Psychological Sciences, 6,* 133–139.

Mahoney, M. J. (1991). *Human change processes: The scientific foundations of psychotherapy.* New York: Basic Books.

Mahoney, M. J., & Thoreson, C. E. (1972). Behavioral self-control: Power to the person. *Educational Researcher, 1,* 5–7.

Marlatt, G. A., & Gordon, J. R. (1985). *Relapse prevention: A self-control strategy for the maintenance of behavior change.* New York: Guilford Press.

Maslow, A. (1968). *Toward a psychology of being* (2nd ed.). New York: Van Nostrand Reinhold.

McConnaughy, E. A., DiClemente, C. C., Prochaska, J. O., & Velicer, W. F. (1989). Stages of change in psychotherapy: A follow-up report. *Psychotherapy, 26,* 494–503.

McConnaughy, E. A., Prochaska, J. O., & Velicer, W. F. (1983). Stages of change in psychotherapy: Measurement and sample. *Psychotherapy, 20,* 368–375.

Miller, W. E., & Heather, N. (1986). Preface. In W. E. Miller & N. Heather (Eds.), *Treating addictive behaviors processes of change.* New York: Plenum Press.

Orlinsky, D. E., Grawe, K., & Parks, B. K. (1994). Process and outcome in psychotherapy-Noch einmal. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (pp. 270–376). New York: Wiley.

Piaget, J. (1966). *Psychology of intelligence.* Totowa, NJ: Littlefield, Adams.

Prochaska, J. O. (1991). Prescribing to the stages and levels of change. *Psychotherapy, 28,* 463–468.

Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory Research and Practice, 20,* 161–173.

Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology, 51,* 390–395.

Prochaska, J. O., & DiClemente, C. C. (1985). Common processes of change for smoking, weight control, and psychological distress. In S. Schiffman & T. Wills (Eds.), *Coping and substance abuse* (pp. 345–364). New York: Academic Press.

Prochaska, J. O., & DiClemente, C. C. (1992). Stages of change in the modification of problem behaviors. In M. Hersen, R. M. Eisler, & P. M. Miller (Eds.), *Progress in behavior modification* (pp. 184–214). Sycamore, IL: Sycamore Press.

Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist, 47,* 1102–1114.

Prochaska, J. O., Redding, C. A., Harlow, L. L., Rossi, J. S., & Velicer,

W. E. (1994). The transtheoretical model of change and HIV prevention: A review. *Health Education Quarterly, 21,* 471–486.
Schiepek, G., Fricke, B., & Kaimer, P. (1992). Synergistics of psychotherapy. In G. Schiepek, W. Tschacher, & E. J. Brunner (Eds.), *Self organization and clinical psychology* (pp. 239–267). Berlin, Germany: Author.
Shapiro, D. A. (1996). Models of change in psychotherapy. *Current Opinion in Psychiatry, 9,* 177–181.
Siegler, R. S. (1994). Cognitive variability: A key to understanding cognitive development. *Current Directions in Psychological Science, 3,* 1–5.
Stiles, W. B., & Shapiro, D. A. (1994). Disabuse of the drug metaphor: Psychotherapy process-outcome correlations. *Journal of Consulting and Clinical Psychology, 62,* 942–948.
Thelen, E. (1995). Motor development: A new synthesis. *American Psychologist, 50,* 79–95.
Thelen, E., & Smith, L. B. (1994). *A dynamic systems approach to the development of cognition and action.* Cambridge, MA: MIT Press.

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Computer-Assisted Therapy in the Treatment of Flight Phobia: A Case Report

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The efficacy of computer-assisted exposure (CAE) therapy for the treatment of flight phobia was examined. The subject was a 34-year-old man with severe fear and almost complete avoidance of flying. Six 50-minute CAE sessions and two 20-minute booster sessions were conducted over a period of 1 month. All self-reported measures of the fear of flying decreased following CAE, and before the subject took a one-hour flight with minimal distress. A follow-up after 6 months revealed that he had flown three times without anxiety. The implications of CAE for treatment of flight phobia are discussed.

FLIGHT PHOBIA is characterized by intense fear of flying, an immediate anxiety response upon exposure to situations related to flying, and avoidance of such situations (American Psychiatric Association, 1994). Epidemiological studies estimate that 25% of the general adult population experiences fear of flying (Dean & Whitaker, 1980) and the point prevalence rate for flight phobia ranges from 2.6% to 10.0% in the general population (Ekeberg, Seeberg, & Ellestern, 1989; Fredrikson, Annas, Fischer, & Wik, 1996; Öst, 1996). Despite this high prevalence rate, in comparison to other phobias, there have been relatively few studies on the treatment of flight phobia (Haug et al., 1987). Controlled studies suggest that behavioral anxiety-management strategies, especially those that include some kind of exposure, can be effective in the treatment of flight phobia (Beckham, Vrana, May, Gustafson, & Smith, 1990; Capafóns, Sosa, & Avero, 1997; Denholtz & Mann, 1975; Girodo & Roehl, 1978; Howard, Murphy, & Clarke, 1983; Solyom, Shugar, Bryntwick, & Solyom, 1973; Walder, McCraken, Herbert, James, & Brewitt, 1987). For example, Öst, Brandberg, and Alm (1997) demonstrated a short, intensive in vivo exposure treatment to be highly effective in the treatment of flight phobics who had previously avoided flying.

Though in vivo exposure to flying appears to be quite effective, the difficulty and expense of in vivo flight exposure have daunted many researchers and therapists (Rothbaum, Hodges, Watson, Kessler, & Opdyke, 1996). These difficulties have led researchers to attempt to simulate the feared flight situations in a realistic and vivid way. First tried in the 1970s, simulated exposures using slide projectors yielded promising results (Denholtz & Mann, 1975; Solyom et al., 1973); however, over the next 15 years, few studies further investigated simulated exposures for flying phobia. Perhaps practical problems, such as difficulties integrating images and sounds, controlling the stimulus presentation, recording patients' self-reported anxiety, etc., limited the application of this exposure strategy. The rapid development of new technologies that can easily address the limitations of slide presentations has again led researchers to develop new simulated exposure treatments. Possible benefits of comprehensive simulated exposure programs include reducing therapist contact time, standardizing treatment, and facilitating dissemination (Newman, Consoli, & Taylor, 1997). In addition, sim-

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